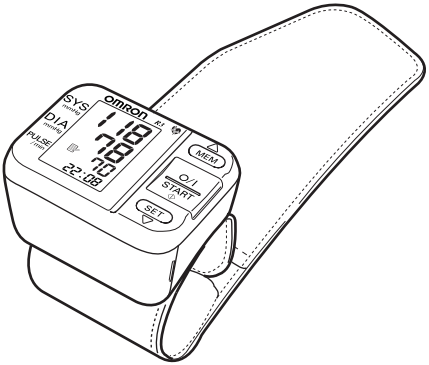
OMRON



Wrist Blood Pressure Monitor

Model R3 Intellisense

- **Instruction Manual**
- **Mode d'emploi**
- **Gebrauchsanweisung**
- **Manuale di istruzioni**
- **Manual de instrucciones**
- **Gebruiksaanwijzing**
- **РУКОВОДСТВО ПО ЭКСПЛУАТАЦИИ**

EN
FR
DE
IT
ES
NL
RU

Intelli™ sense

A Good Sense of Health

IM-HEM-6021-E-02-08/08
1647567-4B

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Introduction

Thank you for purchasing the OMRON R3 Intellisense Wrist Blood Pressure Monitor.

This remarkable, compact and easy to use instrument is ideal for people who frequently monitor their own blood pressure. The small, pre-formed wrist cuff is very convenient and easy to apply.

With a push of a button the OMRON Wrist Blood Pressure Monitor measures your blood pressure and pulse and displays the reading on a clear digital panel. Perfect for quick, easy readings at home, at work, and while travelling. It also stores up to 42 sets of measurements in memory and displays an average reading based on the three most recent measurements taken within 10 minutes of the last reading. (If there are only two readings in memory for that period, the average will be based on two readings. If there is one reading in memory for that period, the average will be based on one reading.)

The OMRON Wrist Blood Pressure Monitor uses the oscillometric method of blood pressure measurement. This means the unit detects the pulse wave vibrations in the artery of your wrist and converts the oscillations into a digital reading.

Clinical research has proven a direct relationship between blood pressure in the wrist and blood pressure in the arm. Changes in wrist blood pressure reflect changes in arm blood pressure because the arteries in the wrist and the arm are connected.

Frequently measuring the blood pressure in your wrist will provide you and your doctor with an accurate indication of changes in your true blood pressure.

Please read this instruction manual thoroughly before using the unit. For specific information about your own blood pressure, CONSULT YOUR DOCTOR.

Important Safety Information

Consult your doctor during pregnancy, arrhythmia and arteriosclerosis.
You should never change the dosage of medication prescribed by your doctor.
People with poor peripheral circulation may find that results for measurements taken at the wrist vary from those taken on the upper arm.
Use the OMRON R3 Intellisense only for yourself.

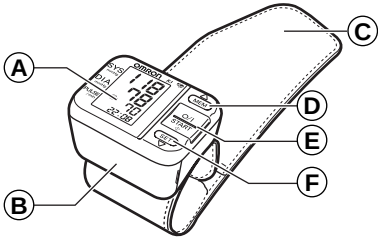
⚠ Caution:

- Self-diagnosis of measured results and treatment are dangerous. Please follow the instructions of your doctor.
- Do not leave the unit unattended with infants or persons who cannot express their consent.
- Do not use the unit for any purpose other than measuring blood pressure.
- Do not use a cellular phone, or other devices that emit electromagnetic fields, near the unit. This may result in incorrect operation of the unit.
- Do not operate unit in a moving vehicle (car, airplane).
- Do not disassemble the unit or wrist cuff.
- Battery liquid may leak and damage the main unit. Please observe the following points.
  - Do not insert the batteries with their polarities incorrectly aligned.
  - When you are not going to use the unit for a long period of time (approximately three months or more), take out the batteries.
  - Replace old batteries with new ones immediately.
  - Do not use batteries of a different type together.
  - Do not use new and used batteries together.
- Do not take measurements when the cuff is not wrapped around your wrist.
- Do not expose the unit to strong shocks or vibrations. Do not drop the unit.

Save these instructions for future reference.

1. Overview

Main Unit



A. Display
B. Battery compartment cover
C. Wrist cuff
D. MEM (Memory) button
E. O/I START button
F. SET button

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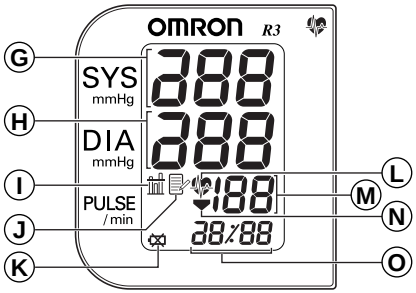
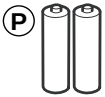
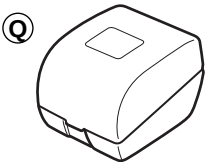
Display



G. Systolic blood pressure
H. Diastolic blood pressure
I. Average value symbol (Displayed when viewing value for the last three measurements.)
J. Memory value symbol (Displayed when viewing values stored in memory)
K. Battery low symbol
L. Heartbeat symbol (Flashes during measurement)
M. Pulse
N. Deflation symbol
O. Date/Time

Package contents





P. Two “AAA” alkaline (LR03) batteries

- Blood pressure pass
- Blood Pressure Monitor unit

Q. Storage case

- Instruction manual
- Guarantee card

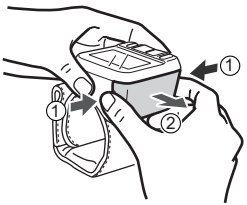
2. Preparation

2.1 Installing/Replacing the Batteries

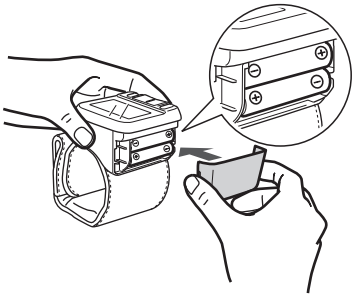
1. Remove the battery compartment cover by pulling it off in the direction of the arrow.

1) Grasp both ends of the battery cover.

2) Pull the cover off the main unit.



2. Insert two identical 1.5V “AAA” alkaline (LR03) batteries in the battery compartment.



Make sure their polarity (+/-) is aligned with the polarity (+/-) as indicated in the battery compartment.

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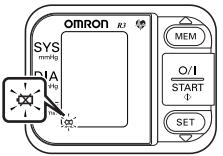
3. Put the battery cover back in place.

Note: Be sure to set the date and time after installing or replacing the batteries. Refer to “2.2 Setting the Date and Time”.
The measurement values continue to be stored in memory even after the batteries are replaced.

Battery Life & Replacement



If the battery low symbol ( ) appears on the display, replace both batteries at the same time.

- When the battery low symbol ( ) starts to blink, you will still be able to use the unit for a short while. You should replace the batteries with new ones ahead of time.
- When the symbol ( ) remains lit, the batteries were exhausted. You should replace the batteries with new ones at once.

• Turn the unit off before replacing the batteries.
• Remove the batteries if the unit will not be used for three months or more.
• If the batteries are removed, the Date/Time setting will need to be reset. See “2.2 Setting the Date and Time” for details.
• Dispose of batteries according to applicable local regulations.
• Two new identical 1.5V “AAA” alkaline batteries will last for approximately 300 measurements, when used to take two measurements a day.
• Since the supplied batteries are for monitoring use only, they may have a shorter life and not last for 300 measurements.

2.2 Setting the Date and Time

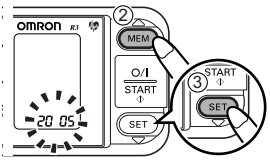
Your blood pressure monitor automatically stores up to 42 measurement values in its memory and calculates an average value based on the three most recent measurements taken within 10 minutes of the last reading. (If there are only two readings in memory for that period, the average will be based on two readings. If there is one reading in memory for that period, the average will be based on one reading.) To make use of the memory and average value function:

- Set the unit to the correct date and time before taking a measurement for the first time.
- If the batteries have been removed, the date and time setting will need to be reset.
- When the batteries are installed and the unit is turned on for the first time, the year digits (2005) will flash on the display.
- The range for the year setting is 2005 to 2030. If the year reaches 2030, it will return to 2005.

1. To set or reset the date and time, press the SET button until the setting you want to adjust appears on the display.

2. Press the MEM button to advance the digits one at a time.

Note: If you hold down the MEM button, the digits will advance rapidly.



3. Press the SET button to confirm the setting when the desired number appears on the display.

The year setting is set and the month digits will flash.

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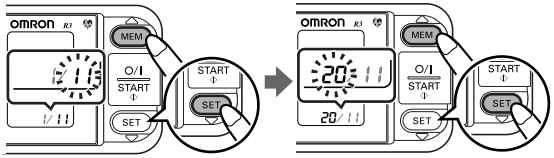
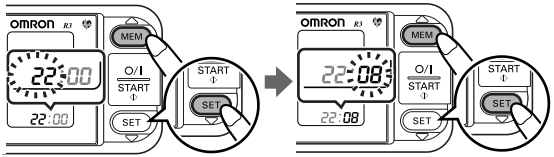
4. Repeat steps 2 and 3 to set the month and day.



5. Repeat steps 2 and 3 to set the hour and minutes for the time.



After all settings are completed the display may still be flashing. To confirm settings and shut off the unit press O/I START button.

Note:

The unit will automatically turn itself off after you press the SET button to confirm the minute setting when the batteries are installed for the first time.

3. Using the Unit

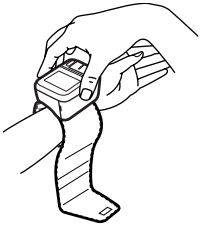
3.1 Applying the Wrist Cuff

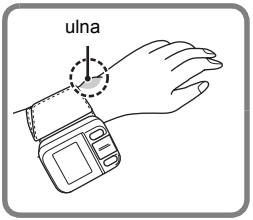
You can take a measurement on either your left or right wrist.

Notes:

- To ensure correct measurement, apply the wrist cuff so that it fits comfortably around your wrist.
- Roll up your sleeve so that the unit covers bare skin.
- Do not apply over clothing.

1. Place the wrist cuff over your left wrist with your left thumb facing upward.





Note: Make sure that the wrist cuff does not cover the protruding part of the wrist bone (ulna) on the outside of the wrist.

2. Hold the bottom part of the wrist cuff and wrap it around the wrist while pulling so that it fits comfortably.

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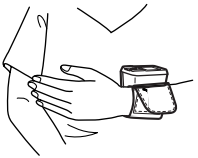
Note: Unless the wrist cuff is wrapped securely around the wrist, it may not be possible to take correct measurements.

Smooth the cuff with your fingers to ensure that it fits snugly around the wrist.

Notes:

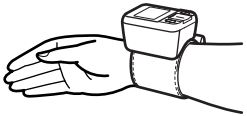
- If the fastener is not wrapped securely around your wrist, the cuff may slip during measurement.
- If you have a slender wrist, the cuff may feel slightly loose. However, this will not affect measurement results and you should not force the cuff to fit.
- The remaining part of the wrist cuff can be conveniently folded back out of the way.

- If the remaining part of the cuff is difficult to fold back, measurement results will not be effected.



Taking a reading on the right wrist

Measurements can also be made on the right wrist.
Fit the unit on the right wrist as shown.



3.2 Correct Posture

Correct posture during measurement helps you get accurate results.
You should also try to measure your blood pressure at the same time each day.

Notes:

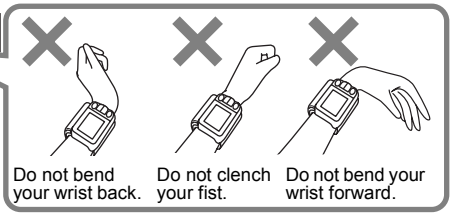
- Do not take measurement after bathing, drinking alcohol, or exercising.
- Do not move or talk during measurement.

Sit comfortably with your back straight, hold your arm across your chest and relax.

Position your arm so that the unit is at the same level as your heart (height of a nipple).

Do not use your other hand to support the wrist cuff. This can result in inaccurate measurement results.

Relax your wrist and hand.



Do not bend your wrist back.

Do not clench your fist.

Do not bend your wrist forward.

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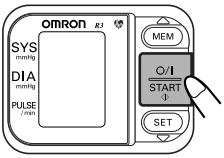
3.3 Taking a Reading

1. Press the O/I START button to start measurement.

The wrist cuff will start to inflate automatically after the power is turned on.

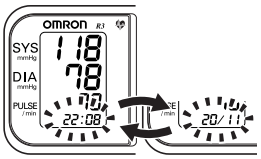


2. After the unit has detected your blood pressure and pulse rate, the cuff automatically deflates and your blood pressure and pulse rate are displayed.

Notes:

- Sit still and do not talk or move until the measurement is completed.
- Keep the unit at heart height until the measurement is completed.
- To stop measurement, press the O/I START button at any time during measurement.

3. Check the measurement result.



The unit automatically stores blood pressure and pulse rate into its memory. Refer to “3.4 Using the Memory Function”.

The time and date of the measurement are displayed alternately.

Recent research suggests that the following values can be used as a guide to high blood pressure for measurements taken at home.

Systolic Blood Pressure	Above 135 mmHg
Diastolic Blood Pressure	Above 85 mmHg

Note: This criteria is for home blood pressure measurement.
For professional office blood pressure measurement criteria, please refer to “Classification of Blood Pressure by the World Heath Organization” (refer to “8. Some Useful Information about Blood Pressure”).

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4. Undo the fastener and remove the unit.

5. Press the O/I START button to turn off the unit.

If you forget to turn off the unit, it will shut itself off automatically after two minutes.

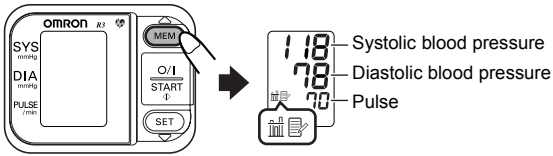
3.4 Using the Memory Function

This unit has a memory capable of storing 42 sets of readings. Every time you complete the measurement, the unit automatically stores blood pressure and pulse rate.
If there are three readings within 10 minutes of the last reading, the average of the three readings is displayed. (If there are only two readings in memory for that period, the average will be based on two readings. If there is one reading in memory for that period, the average will be based on one reading.)

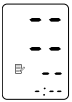
Note: When 42 sets of readings are stored in memory, the oldest set will be deleted to store a new set.

To View the Average Value

Press the MEM button.

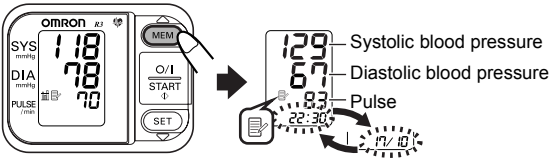


If there are no measurements results stored in memory, the screen to the right is displayed.



To View Previous Readings Stored in Memory

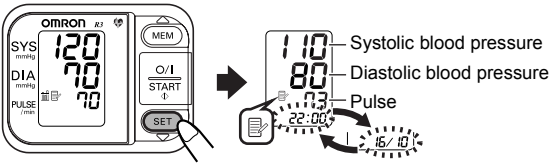
1. Press the MEM button, while the average reading is displayed, to view readings stored in memory from the most recent to the oldest.



Press the MEM button repeatedly to cycle through the readings.

Note: The date and time of stored readings will be alternately displayed.

2. Press the SET button, while the average reading is displayed, to view readings stored in memory from the oldest to the most recent.



Press the SET button repeatedly to cycle through the readings.

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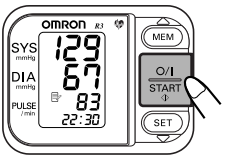
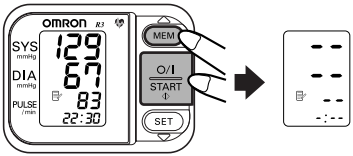
3. Press the O/I START button to turn the unit off.

Note: If you forget to turn the unit off, it will automatically shut itself off after two minutes.



To Delete All Values in Memory

You cannot delete the stored readings partially, all the reading in the unit will be deleted.
To delete stored readings, first press the MEM button. Then while holding it down, press the O/I START button simultaneously for about 2-3 seconds. All readings will then be deleted.



Notes:

- After the reading have been deleted, the screen to the right of the illustration above appears and Memory display flashes. Release the buttons to return to the memory display.
- If the date and time are reset to a time before the most recent measurement, the average value will be based on any measurements taken after the date and time were reset. However, you can still view the readings stored in memory.

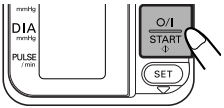
4. Quick Reference Guide

Use this as a quick reference guide only. If you are using this device for the first time, please read carefully Chapter 3 of this Instruction Manual.
Avoid eating, drinking, smoking, or exercising for at least 30 minutes before taking a measurement. You should also try to measure your blood pressure at the same time each day. It is recommended that you check your blood pressure at least twice a day, in the morning before breakfast and in the evening before going to bed.
Measurement should be taken in a quiet place and you should be in a relaxed, seated position.

1. Align the wrist cuff with the level of your heart and gently support your left arm with your right hand. Do not place your right hand on the cuff itself.

2. Press the O/I START button.

Remain quiet, sit still and do not talk during the measurement.



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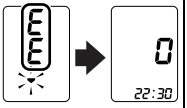
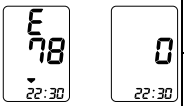
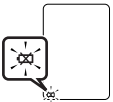
Notes:

- Always wait at least 2-3 minutes before taking another blood pressure measurement.
  You may require more rest time between readings depending on your individual physiological characteristics.
- Only use the R3 Intellisense to measure your own blood pressure since the results of measurements are stored in memory.
- Always wrap the wrist cuff around your wrist before starting to take a measurement.
- Always measure your blood pressure on the same wrist.

5. Handling Errors and Problems

5.1 Error Messages

Error Symbol	Cause	Correction
	Cuff over inflated.	Repeat measurement. Remain still and do not move during measurement. (Refer to section 3.3.)
	Movement during measurement.	
	The wrist cuff is not fastened securely.	Carefully read and repeat the steps listed under section 3.1.
	An E mark with a code/number indicates the device has a hardware failure.	Consult your OMRON retail outlet or distributor.
 Blinks or appears continuously	The battery power is low.	Replace the batteries with two new “AAA” alkaline (LR03) batteries.

5.2 Troubleshooting

Symptom	Cause	Correction
The reading is extremely low (or high).	Are you holding the wrist cuff at heart level?	Measure while in the correct posture. (Refer to section 3.2.)
	Is the cuff wrapped snugly around the wrist?	Wrap the cuff correctly. (Refer to section 3.1.)
	Are your arms and shoulders tense?	Relax and try taking the measurement again. (Refer to section 3.3.)
	Movement or talking during measurement.	Remain still and do not talk during measurement. (Refer to section 3.3.)
Wrist cuff pressure does not rise.	Air is leaking from the wrist cuff.	Consult your OMRON retail outlet or distributor.
Wrist cuff deflates too soon.	The wrist cuff is loose.	Apply the cuff correctly so that it is securely wrapped around the wrist. (Refer to section 3.1.)

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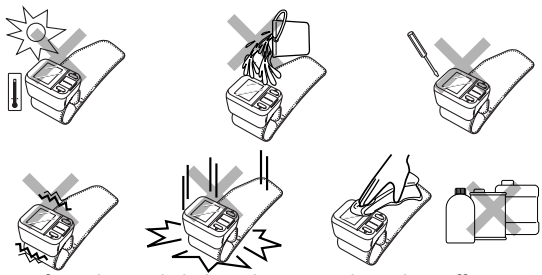
Symptom	Cause	Correction
The blood pressure is different each time. The reading is extremely low (or high).		Blood pressure readings constantly vary with time of measurement and nervous condition. Take deep breaths to relax before taking a measurement.
The unit loses power during measurement.	The batteries are empty.	Replace the batteries with new ones.
Nothing happens when you press the buttons.	The batteries are empty.	Replace the batteries with new ones.
	The batteries have been inserted incorrectly.	Insert the batteries with the correct (+/-) polarity.
Other problems.	• Press the O/I START button and repeat measurement. • If the problem continues, try replacing the batteries with new ones. If this still does not solve the problem, contact your OMRON retail outlet or distributor.	

6. Maintenance and Storage

To protect your unit from damage, please avoid the following:

- Subjecting your unit to extreme temperatures, humidity, or direct sunlight.
- Washing the cuff or exposing the cuff or unit to water.
- Disassembling the unit.
- Subjecting the unit to strong shocks or vibrations. Dropping the Unit.
- Cleaning the unit with volatile liquids. THE UNIT SHOULD BE CLEANED WITH A SOFT, DRY CLOTH.



Use a soft, moistened cloth and soap to clean the cuff.

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Keep the unit in its storage case when not in use.
Fold the cuff into the storage case.

Do not store the unit in the following situations:

- If the unit is wet.
- Locations exposed to extreme temperatures, humidity, direct sunlight, dust or corrosive vapours.
- Locations exposed to vibrations, shocks or where it will be at an angle.
- Locations exposed to chemicals or corrosive vapours.

Calibration and Service

- The accuracy of this blood pressure monitor has been carefully tested and is designed for a long service life.
- It is generally recommended to have the unit inspected every two years to ensure correct functioning and accuracy. Please consult your authorised OMRON dealer or the OMRON Customer Service at the address given on the packaging or attached literature.
- If the wrist cuff needs to be replaced have this done by an authorised expert. Consult your authorised OMRON dealer or the OMRON Customer Service.
- Do not carry out any repairs by yourself. If a defect occurs or you have doubts about the correct functioning of the device, consult your authorised OMRON dealer or the OMRON Customer Service.

7. Technical Data

Product Description	Wrist Blood Pressure Monitor
Model	OMRON R3 Intellisense (HEM-6021-E)
Display	LCD Digital Display
Measurement	Oscillometric method
Measurement Range	Pressure: 0 to 299 mmHg Pulse: 40 to 180 beats/min
Memory	42 Measurements with date and time
Accuracy	Pressure: Within ±3 mmHg Pulse rate: Within ±5% of reading
Inflation	Automatic inflation by pump
Deflation	Automatic rapid deflation
Pressure Detection	Capacitive pressure sensor
Power Source	Two 1.5V “AAA” alkaline (LR03) batteries
Battery Life	Approximately 300 measurements when using alkaline batteries at a room temperature of 23°C
Operating Temperature/ Humidity	10°C to 40°C, 30 to 85% RH
Storage Temperature/ Humidity	-20°C to 60°C, 10 to 95% RH
Weight of Main Unit	Approximately 120 g (not including batteries)
Outer Dimensions	72 mm (w) x 56 mm (h) x 44 mm (d) (not including the wrist cuff)
Measurable circumference of wrist	Approximately 13.5 to 21.5 cm
Package Content	Storage case, two “AAA” alkaline (LR03) batteries, instruction manual, guarantee card, blood pressure pass

Note: Subject to technical modification without prior notice.

- This OMRON product is produced under the strict quality system of OMRON Healthcare Co. Ltd., Japan. The Core component for OMRON blood pressure monitors, which is the Pressure Sensor, is produced in Japan for assembly.
- Disposal of this product and used batteries should be carried out in accordance with the national regulations for the disposal of electronic products.

= Type B CE 0197

This device fulfils the previsions of EC directive 93/42/EEC (Medical Device Directive). This blood pressure monitor is designed according to the European Standard EN1060, Non-invasive sphygmomanometers Part 1: General Requirements and Part 3: Supplementary requirements for electromechanical blood pressure measuring systems.

Caution: Please read the instruction manual carefully before using the device.

Important information regarding Electro Magnetic Compatibility (EMC)

With the increased number of electronic devices such as PC's and mobile (cellular) telephones, medical devices in use may be susceptible to electromagnetic interference from other devices. Electromagnetic interference may result in incorrect operation of the medical device and create a potentially unsafe situation.
Medical devices should also not interfere with other devices.

In order to regulate the requirements for EMC (Electro Magnetic Compatibility) with the aim to prevent unsafe product situations, the EN60601-1-2 standard has been implemented. This standard defines the levels of immunity to electromagnetic interferences as well as maximum levels of electromagnetic emissions for medical devices.

This medical device manufactured by OMRON Healthcare conforms to this EN60601-1-2:2001 standard for both immunity and emissions.
Nevertheless, special precautions need to be observed:
Do not use mobile (cellular) telephones and other devices, which generate strong electrical or electromagnetic fields, near the medical device. This may result in incorrect operation of the unit and create a potentially unsafe situation. Recommendation is to keep a minimum distance of 7 m. Verify correct operation of the device in case the distance is shorter.

Further documentation in accordance with EN60601-1-2:2001 is available at OMRON Healthcare Europe at the address mentioned in this instruction manual.
Documentation is also available at www.omron-healthcare.com.

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Correct Disposal of This Product (Waste Electrical & Electronic Equipment)

This marking shown on the product or its literature, indicates that it should not be disposed of, with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

This product does not contain any hazardous substances.

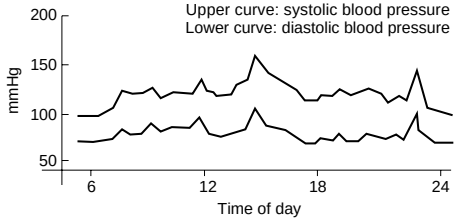
8. Some Useful Information about Blood Pressure

What is Blood Pressure?

Blood pressure is a measure of the force of blood flowing against the walls of the arteries. Arterial blood pressure is constantly changing during the course of the heart's cycle. The highest pressure in the cycle is called the *Systolic Blood Pressure*; the lowest is the *Diastolic Blood Pressure*.
Both pressure readings, the *Systolic* and *Diastolic*, are necessary to enable a doctor to evaluate the status of a patient's blood pressure.

Why is it a Good Thing to measure Blood Pressure at Home?

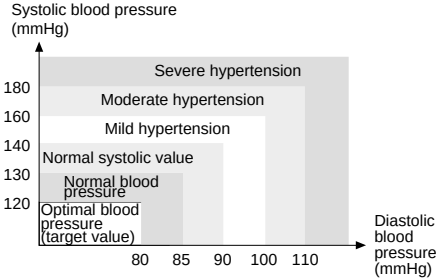
Having your blood pressure measured by a doctor can cause anxiety which is itself a cause of high blood pressure. As a variety of conditions affect blood pressure, a single measurement may not be sufficient for an accurate diagnosis. Many factors such as physical activity, anxiety, or the time of day, can influence your blood pressure. Thus it is best to try and measure your blood pressure at the same time each day, to get an accurate indication of any changes in blood pressure. Blood pressure is typically low in the morning and increases from afternoon to evening. It is lower in the summer and higher in the winter.
Blood pressure is measured in millimetres of mercury (mmHg) and measurements are written with the systolic pressure before the diastolic e.g. A blood pressure written as 135/85, is referred to as 135 over 85 mmHg.



Example: fluctuation within a day (male, 35 years old)

Classification of Blood Pressure by the World Heath Organization

The World Health Organization (WHO) and the International Society of Hypertension (ISH) developed the Blood Pressure Classification shown in this figure.



This classification is based on the blood pressure values measured on people in a sitting position in outpatient departments of hospitals.

* There is no universally accepted definition of hypotension. However, those having the systolic pressure below 100 mmHg are assumed as hypotensive.

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